Compensatory Measures

A. <u>Background:</u>

These compensatory measures (CMs) are established to delineate licensee responsibility in response to the threat environment presently in existence in the aftermath of the events of September 11, 2001. Excessive work schedules can challenge the ability of security force personnel to remain vigilant and effectively perform their duties.

B. Scope:

Operating nuclear power reactor licensees shall comply with the following CMs to ensure, in part, that nuclear facility security force personnel are not assigned to duty while in a fatigued condition that could reduce their alertness or ability to perform functions necessary to identify and promptly respond to plant security threats. Work hour controls shall apply to personnel performing the following functions: armed member of the security force, central alarm station operator, secondary alarm station operator, security shift supervisor, and watchperson (i.e., watchman).

C. Compensatory Measures:

- 1. Individual Work Hour Controls
 - (a) Personnel performing the functions identified in B:
 - (1) Shall not exceed the following limits, excluding shift turnover time:
 - (i) 16 hours in any 24-hour period,
 - (ii) 26 hours in any 48-hour period, and
 - (iii) 72 hours in any 7-day period.
 - (2) Shall have a minimum 10-hour break between work periods. The participation in turnover is permitted during the break period.
 - (3) May be authorized, by the licensee, to deviate from the limits specified in C.1(a)(1) and/or C.1(a)(2) provided:
 - (i) The licensee could not have reasonably foreseen or controlled the circumstance necessitating the deviation,
 - (ii) The security shift supervisor has determined that the deviation is required to maintain the security for the facility,
 - (iii) An evaluation is performed, in advance, by individuals with training, as provided by the licensee, in the symptoms, contributing factors, and effects of fatigue that determined that the individual's fitness for duty would not be

adversely affected by the additional work period to be authorized under the deviation, and

(iv) The basis and approval for C.1(a)(3) items (i), (ii), and (iii) are documented.

Note 1: An 8-hour break may be authorized as deviation from the 10-hour requirement of C.1(a)(2) if the deviation is required for a scheduled transition of crews between work schedules or shifts.

- (b) The number and duration of approved deviations shall be limited to the extent practicable.
- (c) The licensee shall monitor and control individual work hours to ensure that excessive work hours are not compromising worker alertness and performance.

2. Group Work Hour Controls

Group average work hours for personnel performing the functions identified in B shall be controlled in accordance with the following limits:

- (a) Normal Plant Conditions: The average number of hours actually worked by personnel performing the functions identified in B, shall not exceed 48 hours per week averaged over consecutive periods not to exceed six (6) weeks. Workers who did not work at least 75 percent of the normally scheduled hours during the averaging period shall not be included when calculating the average.
- (b) Planned Plant or Planned Security System Outages:
- (1) The average number of hours actually worked by personnel performing the functions identified in B, shall not exceed 60 hours per week averaged over consecutive periods not to exceed six (6) weeks. For planned abnormal plant conditions whose duration is less then the averaging period the limit would be 60 hours per week averaged over the duration of the condition. Workers who did not work at least 75 percent of the normally scheduled hours during the averaging period shall not be included when calculating the average.

Note 2: Licensee may define the beginning of a planned plant outage to be up to 3 weeks prior to the plant shutdown (i.e., plant operational mode not equal to 1).

- (2) The limit defined in C.2(b)(1) can be used for up to 90 days. For periods greater than 90 days, the licensee shall take prompt action to limit hours worked in accordance with the requirements of C.2(a). The use of the limits defined in C.2(b)(1) shall not exceed 120 days.
- (c) Unplanned Plant or Unplanned Security Outages or An Increase in Plant Threat Condition (i.e., increase in protective measure level as promulgated by NRC Advisory):

- (1) There are no specific group limits for this condition.
- (2) For periods greater than 90 days, the licensee shall take prompt action to limit hours worked in accordance with the requirements of C.2(a). The use of the allowance defined in C.2(c)(1) shall not exceed 120 days.

Note 3: For the purposes of these CMs, the baseline threat condition is defined as the least significant threat condition in effect in the last 120 days.

Note 4: If an increase in threat condition occurs while the plant is in a planned outage, the requirements of C.2(c) apply for the increased threat condition. If the threat condition returns to the baseline threat condition during the planned outage, the requirements of C.2(b) apply using the original licensee defined start date for the planned outage.

Note 5: If multiple increases in threat condition occur while the conditions of C.2(c) are in effect, the requirements of C.2(c)(2) reset with each increase.

Note 6: If the threat condition decreases, the new threat condition shall be compared to the baseline to determine if the requirements of C.2(c) apply as a result of an increased threat condition. If so, C.2(c)(2) shall be referenced to the date when the current threat condition was last entered as the result of an increase.

Note 7: Licensees shall reference changes in threat condition prior to the issuance of these CMs to determine the baseline threat condition and whether the requirements of C.2(c) apply.

- 3. Licensees shall be exempt from the requirements of C.1 and C.2 during declared emergencies as defined in the licensee's emergency plan.
- 4. Procedures

Develop or augment procedures, as necessary, for personnel within the scope of this CM to:

- (a) Describe the process for implementing the controls for hours worked specified in C.1, C.2, and C.3 of this CM.
- (b) Describe the process to be followed if an individual reports prior to or during a duty period that he or she considers himself or herself unfit for duty due to fatigue.
- (c) Document self-declarations of unfit for duty due to fatigue if upon completion of the licensee's evaluation it is determined the individual should be returned to work without a break of at least 10 hours.